
The Loan Arranger

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Revolving Loan and Operator Certification Section
Environmental Science and Services Division
Michigan Department of Environmental Quality **DEQ**

Grosse Ile Township: Making Headway in Waterways Protection

by Edwynna McKee

In an effort to control sanitary sewer overflows from the island's wastewater treatment plant to the Trenton Channel of the Detroit River, the township has undertaken a \$40 million, five-year construction project, investing in new interceptor sewers, an equalization basin, and other wastewater treatment plant (WWTP) upgrades. The sewer system, built in 1965, was a combined system with 14 overflow points. Over the past 30 years, the township has moved to transform the island's 58 miles of combined sewer pipe into separated sanitary and storm sewer systems. However, even with the long-term and costly process of sewer separation close to completion, the island still recorded more than 60 days of sanitary sewer overflow to local waterways from June 1989 until 2001. A volume of untreated sanitary sewage, estimated to be in excess of 50 million gallons, flowed into the Trenton Channel and the Detroit River, both waterways that help define the township of Grosse Ile.

The township is composed of 12 islands, Grosse Ile being the largest; the lands were purchased from the Potawatomi Indians on July 6, 1776, by the Macomb brothers. Development began after the Revolutionary War. The oldest existing island building is the Rucker homestead (circa 1806). There are 74 historical points of interest on Grosse Ile, such as the Cameron Waterman home. Cameron Waterman, a gentleman farmer, financed the first telephone cable to the island in 1890. Many generations of the family enjoyed the carefree summer life, including two of the Waterman boys who ingeniously turned a motorcycle engine into the first outboard motor, their patent later becoming the property of Evinrude. A number of notables have called the island 'home' (or at least one of their homes!) and some still do: one of America's Champion Trees, so desig-

nated by the American Forests Association; a great and gracious Downy Hawthorne, on Macomb Street, is the largest tree of its species in the United States. Another island resident, the Michigan Champion Honey Locust Tree, enjoys life on East River Drive.

Not only is the island surrounded by the Detroit River to the east, and the Trenton Channel of the Detroit River to the west, but an enhanced navigable natural canal receiving its flow directly from the Detroit River flows diagonally

across the island from the northeast side to the mid-southwest side. The Thorofare (see photo above), as the canal was named



more than a century ago, offers additional recreational opportunities to residents; its health is a priority to the township, as is the health of the Detroit River, as the presence of both waterways contributes greatly to the allure of Grosse Ile.

The quality of these waterways has suffered in the past. Tremendous strides and community resources, from throughout the river basin, have been invested in efforts to bring the river back to health. Grosse Ile Township is in the midst of a system overhaul. Construction underway on the island is expected to virtually eliminate the type of overflows experienced in the last decade, except under extreme, rare circumstances. The photos below

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show the township wastewater treatment site prior to construction, and a recent shot of the work-in-progress.

The grassy site shown on the right has been substantially excavated (second photo-shown below), made necessary



to construct the new pump station and an adjacent 6.5 million gallon retention basin. Elsewhere on the island, sewers and interceptors continue to be replaced, rehabilitated, or added to the existing system. The work on the WWTP site and throughout the island is focused



on two objectives: make the sanitary sewer system free of excess flows, and provide adequate holding capacity for any flows that exceed the treatment

plant's functioning ability. During and after a large rain storm, for example, the sanitary system may transport flow volumes that exceed the plant's treatment rate. In that scenario, the excess flows will be directed to the large, covered, aerated basin until the plant has treatment capacity available. The flows leaving the treatment plant via the discharge point under Grosse Ile Parkway are anticipated to receive full treatment and meet the standards specified in the township of Grosse Ile's National Pollutant Discharge Elimination System Permit issued December 29, 1998, and the Administrative Consent Order issued April 26, 2001. The township estimates that this multi-year construction project should reach completion by July 2005, at which point, all unpermitted flows are expected to be eliminated.

The township of Grosse Ile and its citizens are to be commended for their investment in the protection of the Detroit River and its nearby waterways.

by Wendy Jansma

In a race to improve wastewater and drinking water treatment facilities, 13 communities crossed the finish line during the 3rd Quarter to capture over \$70 million in loans. The State Revolving Fund (SRF) provides low-interest financing for communities to make needed improvements to wastewater collection and treatment facilities, while the Drinking Water Revolving Fund (DWRf) finances improvements to public drinking water systems.

The SRF assisted 3 projects with loans totaling \$51.37 million, while the DWRf provided loans to 10 communities totaling \$19.665 million. Following are the communities receiving loans in 3rd Quarter, with a brief description of the project and the loan amounts:

SRF Projects

- **Lenawee County (Palmyra Twp.)** – \$1,875,000 for a new collection system to address failing onsite systems in the village of Palmyra.
- **Lake St. Clair Clean Water Initiative (St. Clair Shores – Roseville – Eastpointe) Drain Drainage District** - \$975,000 for the final segment of wastewater system improvements that will reduce combined sewer overflows to Lake St. Clair from the communities of St. Clair Shores, Roseville, and Eastpointe.
- **Detroit** - \$48,520,000 for the third segment of planned wastewater treatment plant improvements.

DWRf Projects

- **Charlevoix County (Boyne Falls)** – \$595,000 for a new 150,000-gallon water storage tank to replace the existing undersized tank in the village of Boyne Falls
- **Boyne City** – \$1,785,000 for new water main, water storage reservoir, production well, and water pressure booster station to correct storage and distribution system deficiencies.
- **Ypsilanti Community Utilities Authority** – \$3,355,000 for a second connection to the Detroit Water and Sewerage Department water supply for improved reliability.
- **Ypsilanti** – \$785,000 for the city's share of the second Detroit water supply connection and \$4,920,000 for water main replacement to alleviate water flow and pressure problems within the city.
- **Barry County (Yankee Springs Twp.)** - \$650,000 for a new elevated water storage tank to enhance system capacity and reliability in Yankee Springs Township.
- **Belding** - \$685,000 for a new well and water main improvements.

ACROSS THE FINISH LINE



- **Filer Township** – \$1,490,000 for a new water storage tank, improvements to the existing tank, and new water main for Filer Township in Manistee County.
- **Davison** - \$2,430,000 for new water main to correct distribution system deficiencies.
- **Monitor Township** - \$455,000 for new water main in Monitor Township, Bay County, to address water quality and reliability concerns.
- **Port Sanilac** – \$2,135,000 for new water main and an iron treatment/softening system to correct water quality and distribution system deficiencies.

The SRF and DWRP programs provide a significant ongoing source of funding to meet the challenges of water quality and public health protection in the state. These 3rd Quarter loans bring total SRF commitments to over \$1.8 billion and DWRP loan assistance to nearly \$230 million.

Proposal 2 Update

by Chip Heckathorn

In the Fall 2002 edition of the Loan Arranger we provided an overview of the Great Lakes Water Quality Bond Proposal, an initiative that appeared on the November 2002 ballot as Proposal 2. Of the four state-wide proposals on the ballot, Proposal 2 was the only one that passed, capturing over 60 percent of the vote. The Proposal authorizes the state of Michigan to sell up to \$1 billion in general obligation bonds over not less than ten years to finance water quality improvement projects. Ninety percent of the bond proceeds are to be deposited into the State Revolving Fund (SRF), while the remaining ten percent will capitalize a new revolving loan fund called the Strategic Water Quality Initiatives Fund (SWQIF). This new fund can finance two specific kinds of projects that are not SRF eligible: projects for the onsite replacement/upgrade of failing septic systems, and those that accomplish the removal of groundwater or storm water from sanitary or combined sewer leads. The SRF is limited to publicly owned improvements, while the SWQIF is designed to be used for improvements to facilities that will remain in private ownership.

The question we are most frequently being asked is: "What is going on with Proposal 2?" Well, here goes:

- (1) Discussions have been held with the State Treasurer and the Governor's Office, and we have been assured that when needs exist for Proposal 2 resources, bonds will be sold. During development of the Fiscal Year 2004 Project Priority Lists, we will be able to better gauge demand for loan assistance in the coming fiscal year and ascertain if bonds need to be sold, and if so, when and how much.
- (2) An internal workgroup has been regularly meeting since last winter to iron out details of Proposal 2

implementation and "put wheels" on the new SWQIF. This workgroup is relying heavily on information provided by communities intending to apply for assistance from the SWQIF.

- (3) SRF guidance documents and forms are being revised so they can accommodate not only the SRF, but the SWQIF as well, with the intent of having them available for use in the Fiscal Year 2004 funding cycle.
- (4) Outreach efforts are ongoing to get the word out about the details of Proposal 2. Most importantly, we are trying to ensure that potential applicants are fully aware of the financing possibilities available in both the SRF and SWQIF. We intend to post additional information, including updated guidance documents and application forms on our web site as soon as they are available.

What are the most important things to remember about Proposal 2? First, bond proceeds from Proposal 2 will dramatically increase the capabilities of the current SRF program. The additional capitalization will not only substantially increase the annual lending capacity of the program, but should also allow us to maximize assistance through even more competitive interest rates. Second, any public entity considering a water pollution control project should contact our office to arrange a pre-planning meeting. This meeting will allow MDEQ staff to meet with local decision makers, explain the SRF/SWQIF programs, and help ensure that an informed decision is made about financing options. Lastly, the SWQIF planning, application, and loan award processes will mirror those that have existed in the SRF since its inception. The same project planning requirements, program timelines, and annual funding cycles will be employed.

Simply put, you won't know if these programs can assist your community in meeting its water quality needs unless you ask. One simply inquiry could save your community a lot of money and it won't cost you anything to find out.

PUBLIC HEARING DATES ARE ANNOUNCED

The Michigan Department of Environmental Quality has set the dates for the Fiscal Year 2004 Public Hearings on the draft Project Priority Lists and draft Intended Use Plans.

Drinking Water Revolving Fund – August 27, 2003
(for project plans received or postmarked no later than May 1, 2003)

State Revolving Fund/Strategic Water Quality Initiatives Fund – September 24, 2003 (for project plans received or postmarked no later than July 1, 2003)

Both Public Hearings will be held at 1:30 p.m. in Constitution Hall, the DEQ's new office building at 525 W. Allegan in downtown Lansing.

Drinking Water Vulnerability Assessments and the DWRP

The following is an excerpt from a letter issued by the DEQ Water Division (WD) on March 24, 2003. (Please refer to web site, http://www.michigan.gov/deq/0,1607,7-135-3313_23413-70056--,00.html to see the entire letter.)

Vulnerability Assessment Requirements

"The Public Health, Security, and Bioterrorism Preparedness and Response Act of 2002 (Bioterrorism Act) requires all water systems serving a population greater than 3,300 to prepare a Vulnerability Assessment (VA). The following are the specific deadlines for completing water system VAs:

- ? Systems serving at least 100,000 persons; VA completed prior to March 31, 2003.
- ? Systems serving 50,000 to 99,999; VA completed prior to December 31, 2003.
- ? Systems serving 3,301 to 49,999; VA completed prior to June 30, 2004.

The VA must be submitted to the U.S. Environmental Protection Agency (EPA) together with a certification that the document meets the requirements of the Bioterrorism Act. In addition, an Emergency Response Plan (ERP) must be developed within six months after completion of the VA that addresses concerns identified in the VA. A certification that the ERP has been prepared must also be submitted to EPA but not the actual document. **Do not send the VA or ERP to the DEQ.** However, please send copies of the certification forms to your DEQ district office.

At your request, DEQ staff [of the WD] will review the VA and ERP at your location."

The VA concept is further defined in the following list taken from the EPA document, Instructions to Assist Community Water Systems in Complying With the Public Health Security and Bioterrorism Preparedness and Response Act of 2002. (The full document is available on the EPA web site at <http://www.epa.gov/safewater/security/util-inst.pdf>)

"A VA is performance based, meaning that it evaluates the risk to the water system based on the effectiveness (performance) of existing and planned measures to counteract potential adversarial actions. The VA elements are:

1. Characterization of the water system, including its mission and objectives;

2. Identification and prioritization of adverse consequences to avoid;
3. Determination of critical assets that might be subject to malevolent acts that could result in undesired consequences;
4. Assessment of the likelihood (qualitative probability) of such malevolent acts from adversaries (e.g., terrorists, vandals);
5. Evaluation of existing countermeasures; and
6. Analysis of current risk and development of a prioritized plan for risk reduction. "

What about Financial Assistance?

Within the Michigan DWRP, loan funds solely to assist with the preparation of a VA are not part of the program. That is to say, preparation of the VA as a stand-alone document is not an eligible cost in the Michigan revolving loan program, and we are not aware of any other sources of VA-only financial assistance for water suppliers serving less than 100,000 persons. However, VA preparation costs may be included in a DWRP loan if the VA is completed in conjunction with a comprehensive DWRP project plan, and the pertinent results of the VA are incorporated into the overall DWRP program

Construction/installation of the identified waterworks safety and security measures may be eligible for DWRP loan assistance, and preparation of the VA would then be eligible as part of the projected project planning process.

Eligible security measures include:

- Facility lighting
- Perimeter fencing
- Security cameras and motion detectors
- Secured storage for chemicals or fuel
- Backflow prevention devices in the distribution system
- Covers for finished water reservoirs
- Security hatches on reservoir or tank access panels and vents

Process-related security measures, which are often extensive in scope or significant in cost, also may be eligible for DWRP assistance, provided the need for each measure was documented in a vulnerability assessment, blended into the full DWRP project plan and discussed at the public hearing held for the proposed project. Examples of such security measures include:

- Enhanced filtration or disinfection for biological agents

- Enhanced treatment for chemical agents
- Other measures, the need for which is demonstrated to the DEQ's satisfaction in accordance with DWRF program requirements.

Note: The hiring of security personnel and the purchase of chemicals for enhanced disinfection are viewed as operation and maintenance costs, and thus are not eligible for DWRF assistance.

For further information about DWRF eligibility of safety and security costs specific to your project, please contact your DWRF project manager in the Revolving Loan and Operator Certification Section.

Disadvantaged Community Status Determinations

By Robert Schneider

One of the components of the Drinking Water Revolving Fund (DWRF) program is the disadvantaged community provisions. If a community qualifies, it may receive 50 additional points in the priority system, loan repayment terms of up-to-30 years, and financial help in defraying project planning costs. But first the community must apply for the determination. A false perception is that a community must have a Median Annual Household Income (MAHI) below the statewide MAHI level. The intent of the disadvantaged status is to provide relief primarily to residential customers who may be economically distressed by high annual user costs, regardless of annual household income. To accomplish this, the Technical Support Unit of the Revolving Loan and Operator Certification Section uses four critical numbers in calculating the disadvantaged status of a community. The first number is the anticipated DWRF project loan amount. The second number is the annual amount of debt service on the existing water system. The third number is the annual anticipated operation, maintenance, and replacement costs of the water system. These three numbers are used to determine the total expenses of the water system. The fourth number is the residential equivalent units (r.e.u.) being served by the water system. The number of r.e.u.s may not be readily available and an approximation may be used for a preliminary determination. The total annual expenses of the water system are then divided by the number (or estimated number) of r.e.u.s in the system to arrive at an annual user cost. This cost is compared against a MAHI threshold. If the cost is greater than the MAHI threshold, a community qualifies.

The Technical Support Unit of the Revolving Loan and Operator Certification Section has prepared a Disadvantaged Community Status Determination Worksheet, which is attached to the Project Plan Submittal Form. We encourage every community applying for a drinking water loan to complete this worksheet so that a determination can be made. Keep in mind that the determina-

tion is not made solely on the basis of household income, but also takes into account community-specific data such as system expenses and customer base. There have been situations where communities assumed they did not qualify, but in fact did. In one case, a community initially seeking funding during the 2001 fiscal year did not receive the disadvantaged determination, but due to project cost increases, did later.



Making Tracks

Comings and Goings

One of the most senior members (not in age, but in tenure) of the Revolving Loan and Operator Certification Section recently accepted a promotion and has left the Department of Environmental Quality. Cindy Salmon came to work for the Municipal Facilities Section of the old Water Quality Division in November of 1984 and spent fully 18 years as a critical part of our team. Initially serving the West Unit of the section, Cindy later assumed responsibilities as the Section Secretary. She saw the wind down of the Federal Construction Grants Program and was instrumental in the creation of both the State Revolving Fund and the Drinking Water Revolving Fund. Cindy saw assistance flow to over \$4 billion of wastewater and water system construction during her time with the programs.

Cindy also served as coordinator of the 2000 Federal Needs Survey and assisted with many of those critical projects that always seemed to need her "special touch." Cindy was often the first point of contact for communities or citizens seeking information about our programs and also served as editor of *The Loan Arranger* for many years. Cindy now works for the Michigan Department of Natural Resources (DNR) in the Office of Land and Facilities, which oversees all real property and building construction activities for the DNR. Cindy continues to live in Grand Ledge with two of her three children and her recently retired husband Gary.

Ms. Deana Bishop is currently on temporary assignment from the Assistant Division Chief's office and will serve as the Section Secretary of the Revolving Loan and Operator Certification Section.

If you know someone who would like to be added to *The Loan Arranger* mailing list, or have an address change, please e-mail the acting editor, Carla Winegar, at winegarc@michigan.gov

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